

AMENDMENTS TO THE CLAIMS:

Please cancel claims 6, 7, 16, and 17 without prejudice or disclaimer of the subject matter thereof, amend claims 8, 11-15 and 18-20, and add claims 21-24 as set forth below. This listing of claims will replace all prior versions and listing of claims in the above-referenced application.

Listing of Claims:

1. (Original) A method of reading desired data from a remote storage device that receives chunks of data from an other storage device, comprising:

determining if the desired data is part of a chunk of data committed by the other storage device;

if the desired data is not part of a chunk of data committed by the other storage device, reading the desired data from a corresponding standard logical device; and

if the desired data is part of a chunk of data committed by the other storage device, transferring the desired data to the standard logical device and obtaining the desired data from one of: the standard logical device after transferring the desired data thereto and the chunk of data committed by the other storage device.

2. (Original) A method, according to claim 1, further comprising:

if the desired data is part of a chunk of data committed by the other storage device, locking a corresponding slot of a cache only virtual device that points to the desired data.

3. (Original) A method, according to claim 2, further comprising:

after locking the corresponding slot, redetermining if the desired data is part of a chunk of data committed by the other storage device.

4. (Original) A method, according to claim 3, further comprising:

if the result of redetermining indicates that the desired data is not part of a chunk of data committed by the other storage device, unlocking the corresponding slot and reading the desired data from a corresponding standard logical device.

5. (Original) A method, according to claim 3, further comprising:

locking a corresponding slot of the standard logical device;

merging corresponding cache slots; and

causing the corresponding slot of the cache only virtual device to point to the standard logical device.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) A method for a host coupled to a remote storage device to read desired data transmitted by a local storage device, comprising:~~according to claim 7,~~

identifying a most recent and consistent set of data containing the desired data; and
obtaining the desired data from the most recent and consistent set of data, wherein the set of data is a chunk of data committed by the local storage device and wherein the chunk of data is assigned a sequence number that is less than a sequence number for other chunks of data containing other data that an other host computer started to write after starting to write the desired data.

9. (Original) A method, according to claim 8, further comprising:

determining if multiple tracks of the remote storage device are being read;
if multiple tracks are being read, determining a first current sequence number prior to reading the tracks, reading the tracks, and determining a second current sequence number; and
if the first current sequence number does not equal the second current sequence number, rereading the tracks.

10. (Original) A method, according to claim 8, further comprising:

determining if multiple tracks of the remote storage device are being read;
if multiple tracks are being read, determining a first current sequence number prior to reading the tracks, reading the tracks, and determining a second current sequence number; and
if the first current sequence number does not equal the second current sequence number, returning an error.

11. (Currently Amended) Computer software that reads desired data from a remote storage device that receives chunks of data from an other storage device, the software comprising:

executable code, in a computer readable medium, that determines if the desired data is part of a chunk of data committed by the other storage device;

executable code, in a computer readable medium, that reads the desired data from a corresponding standard logical device if the desired data is not part of a chunk of data committed by the other storage device; and

executable code, in a computer readable medium, that transfers the desired data to the standard logical device and obtains the desired data from one of: the standard logical device after transferring the desired data thereto and the chunk of data committed by the other storage device if the desired data is part of a chunk of data committed by the other storage device.

12. (Currently Amended) Computer software, according to claim 11, further comprising:

executable code, in a computer readable medium, that locks a corresponding slot of a cache only virtual device that points to the desired data if the desired data is part of a chunk of data committed by the other storage device.

13. (Currently Amended) Computer software, according to claim 12, further comprising:

executable code, in a computer readable medium, that redetermines if the desired data is part of a chunk of data committed by the other storage device after locking the corresponding slot.

14. (Currently Amended) Computer software, according to claim 13, further comprising:

executable code, in a computer readable medium, that unlocks the corresponding slot and reads the desired data from a corresponding standard logical device if the result of redetermining indicates that the desired data is not part of a chunk of data committed by the other storage device.

15. (Currently Amended) Computer software, according to claim 13, further comprising:

executable code, in a computer readable medium, that locks a corresponding slot of the standard logical device;

executable code, in a computer readable medium, that merges corresponding cache slots;
and

executable code, in a computer readable medium, that causes the corresponding slot of the cache only virtual device to point to the standard logical device.

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) Computer software for a host coupled to a remote storage device to read desired data transmitted by a local storage device, comprising; according to claim 17,
executable code, in a computer readable medium, that identifies a most recent and
consistent set of data containing the desired data; and
executable code, in a computer readable medium, that obtains the desired data from the
most recent and consistent set of data, wherein the set of data is a chunk of data committed by
the local storage device and wherein the chunk of data is assigned a sequence number that is less than a sequence number for other chunks of data containing other data that an other host computer started to write after starting to write the desired data.

19. (Currently Amended) Computer software, according to claim 18, further comprising:
executable code, in a computer readable medium, that determines if multiple tracks of the remote storage device are being read;
executable code, in a computer readable medium, that determines a first current sequence number prior to reading the tracks, reads the tracks, and determines a second current sequence number if multiple tracks are being read; and
executable code, in a computer readable medium, that rereads the tracks if the first current sequence number does not equal the second current sequence number.

20. (Currently Amended) Computer software, according to claim 18, further comprising:

executable code, in a computer readable medium, that determines if multiple tracks of the remote storage device are being read;

executable code, in a computer readable medium, that determines a first current sequence number prior to reading the tracks, reads the tracks, and determines a second current sequence number if multiple tracks are being read; and

executable code, in a computer readable medium, that returns an error if the first current sequence number does not equal the second current sequence number.

21. (New) A data storage device that provides a desired chunk of data from a plurality of chunks of data from an other storage device, comprising:

a cache memory that receives the plurality of chunks of data provided to the data storage device from the other storage device;

a plurality of disks that store chunks of data from the cache memory that have been committed by the other storage device;

executable code, in a computer readable medium, that determines if the desired data is part of a chunk of data committed by the other storage device;

executable code, in a computer readable medium, that reads the desired data from at least one of the disks if the desired data is not part of a chunk of data committed by the other storage device; and

executable code, in a computer readable medium, that, if the desired data is part of a chunk of data committed by the other storage device, transfers the desired data to at least one of the disks and obtains the desired data from one of: at least one of the disks after transferring the desired data thereto and the cache memory.

22. (New) A data storage device, according to claim 21, further comprising:

executable code, in a computer readable medium, that locks a corresponding slot of a cache only virtual device that points to the desired data if the desired data is part of a chunk of data committed by the other storage device.

23. (New) A data storage device, according to claim 22, further comprising:

executable code, in a computer readable medium, that redetermines if the desired data is part of a chunk of data committed by the other storage device after locking the corresponding slot.

24. (New) A data storage device, according to claim 23, further comprising:

executable code, in a computer readable medium, that unlocks the corresponding slot and reads the desired data from at least one of the disks if the result of redetermining indicates that the desired data is not part of a chunk of data committed by the other storage device.